CONTENTS

VOL. 12, NO. 1, FEBRUARY 1982

1 *Stephanie F. Ham, D. A. Cooling, P. D. Hiley, Penelope R. McLeish, H. R. A. Scorgie and A. D. Berrie:* Growth and recession of aquatic macrophytes on a shaded section of the River Lambourn, England, from 1971 to 1980

17 *Patricia L. Foster:* Species associations and metal contents of algae from rivers polluted by heavy metals

41 *Patricia L. Foster:* Metal resistances of Chlorophyta from rivers polluted by heavy metals

63 *Árni Einarsson:* The palaeolimnology of Lake Mývatn, northern Iceland: plant and animal microfossils in the sediment

83 *P. R. Wiles:* A note on the watermite *Hydrodroma despiciens* feeding on chironomid egg masses

89 *R. Haas:* Notes on the ecology of *Aphanius dispar* (Pisces, Cyprinodontidae) in the Sultanate of Oman

Brief Communication

97 *H. Persat:* Photographic identification of individual grayling, *Thymallus thymallus,* based on the disposition of black dots and scales

VOL. 12, NO. 2, APRIL 1982

103 *J. S. Welton, M. Ladle and J. A. B. Bass:* Growth and production of five species of Ephemeroptera larvae from an experimental recirculating stream

123 *B. V. Timms:* A study of the benthic communities of twenty lakes in the South Island, New Zealand

139 *Stephen W. Effler, Stephen D. Field and Michael Quirk:* The seasonal cycle of inorganic carbon species in Cazenovia Lake, New York, 1977

149 *Paul Joseph Godfrey:* The eutrophication of Cayuga Lake: a historical analysis of the phytoplankton's response to phosphate detergents

167 *P. Hickley and R. G. Bailey:* Observations on the growth and production of chub *Leuciscus cephalus* and dace *Leuciscus leuciscus* in a small lowland river in southeast England

179 *Robert T. Dillon Jr and Ernest F. Benfield:* Distribution of pulmonate snails in the New River of Virginia and North Carolina, U.S.A.: interaction between alkalinity and stream drainage area

187 *J. M. Brewis and K. Bowler:* The growth of the freshwater crayfish *Austropotamobius pallipes* in Northumbria

201 **Book Review**

VOL. 12, NO. 3, JUNE 1982

203 *Lennart Persson:* Rate of food evacuation in the roach (*Rutilus rutilus*) in relation to temperature, and the application of evacuation rate estimates for studies on the rate of food consumption

211 *Thomas J. Hall:* Colonizing macroinvertebrates in the Upper Mississippi River with a comparison of basket and multiplate samplers

217 *Bo Riemann and Dieter Ernst:* Extraction of chlorophylls *a* and *b* from phytoplankton using standard extraction techniques
225 *C. M. Drake:* Seasonal dynamics of Chironomidae (Diptera) on the Bulrush *Schoenoplectus lacustris* in a chalk stream
241 *J. M. Elliott:* A quantitative study of the life cycle of the case-building caddis *Odontocerum albicorne* (Trichoptrea: Odontoceridae) in a Lake District stream
257 *J. A. Adcock:* Energetics of a population of *Asellus aquaticus* (Crustacea, Isopoda): respiration and energy budgets
271 *J. F. Wright, A. C. Cameron, P. D. Hiley and A. D. Berrie:* Seasonal changes in biomass of macrophytes on shaded and unshaded sections of the River Lambourn, England
285 *R. M. Baxter and J. H. Carey:* Reactions of singlet oxygen in humic waters
293 *Alan R. Hill:* Phosphorus and major cation mass balances for two rivers during low summer flows

VOL. 12, NO. 4, AUGUST 1982

305 *C. F. Mason and S. M. Macdonald:* The input of terrestrial invertebrates from tree canopies to a stream
313 *Morten Søndergaard and Hans-Henrik Schierup:* Release of extracellular organic carbon during a diatom bloom in Lake Mossø: molecular weight fractionation
321 *P. M. Murphy and M. A. Learner:* The life history and production of the leech *Helobdella stagnalis* (Hirudinea: Glossiphonidae) in the River Ely, South Wales
331 *Jackson R. Webster and Jack B. Waide:* Effects of forest clearcutting on leaf breakdown in a southern Appalachian stream
345 *T. Gledhill, Judith Cowley and R. J. M. Gunn:* Some aspects of the host : parasite relationships between adult blackflies (Diptera; Simuliidae) and larvae of the water-mite *Sperchon setiger* (Acari; Hydrachnellae) in a small chalk stream in southern England
359 *D. T. Crisp and G. Howson:* Effect of air temperature upon mean water temperature in streams in the north Pennines and English Lake District
369 *Arthur J. Stewart and Robert G. Wetzel:* Influence of dissolved humic materials on carbon assimilation and alkaline phosphatase activity in natural algal–bacterial assemblages
381 *John M. Melack:* Photosynthetic activity and respiration in an equatorial African soda lake
401 **Book review; Erratum**

VOL. 12, NO. 5, OCTOBER 1982

403 *M. Street and G. Titmus:* A field experiment on the value of allochthonous straw as food and substratum for lake macro-invertebrates
411 *P. Turcotte and P. P. Harper:* The macro-invertebrate fauna of a small Andean stream
421 *Malcolm J. McElhone:* The distribution of Naididae (Oligochaeta) in the littoral zone of selected lakes in North Wales and Shropshire
427 *Marion L. Yallop:* Some effects of light on algal respiration and the validity of the light and dark bottle technique for measuring primary productivity

435 *P. M. Murphy and M. A. Learner:* The life history and production of *Asellus aquaticus* (Crustacea: Isopoda) in the River Ely, South Wales
445 *I. R. Smith:* A simple theory of algal deposition
451 *D. W. Sutcliffe, T. R. Carrick, J. Heron, E. Rigg, J. F. Talling, C. Woof and J. W. G. Lund:* Long-term and seasonal changes in the chemical composition of precipitation and surface waters of lakes and tarns in the English Lake District
507 **Book Review**
508 **Short Notice**

VOL. 12, NO. 6, DECEMBER 1982

509 *A. G. Hildrew and C. R. Townsend:* Editorial
511 *C. M. Drake and J. M. Elliott:* A comparative study of three air-lift samplers used for sampling benthic macro-invertebrates in rivers
535 *L. L. Wright, J. S. Mattice and J. J. Beauchamp:* Effect of temperature and sex on growth patterns in nymphs of the mayfly *Hexagenia bilineata* in the laboratory
547 *Nicholas V. C. Polunin:* Effects of the freshwater gastropod *Planorbis carinatus* on reed (*Phragmites australis*) litter microbial activity in an experimental system
553 *E. H. Ten Winkel and C. Davids:* Food selection by *Dreissena polymorpha* Pallas (Mollusca: Bivalvia)
559 *Marianne C. I. Blaauboer, R. Van Keulen and Th. E. Cappenberg:* Extracellular release of photosynthetic products by freshwater phytoplankton populations, with special reference to the algal species involved
573 *C. J. Williams:* The drift of some chironomid egg masses (Diptera: Chironomidae)
579 *J. Scullion, C. A. Parish, N. Morgan and R. W. Edwards:* Comparison of benthic macro-invertebrate fauna and substratum composition in riffles and pools in the impounded River Elan and the unregulated River Wye, mid-Wales
597 **Book Reviews**
599 **Short Notice**
600 **Author Index**